

**Notice of Allowability**

Application No.

10/809,761

Examiner

Suzanne M. Noakes, Ph.D.

Applicant(s)

STEWART, CHARLES R.

Art Unit

1653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendments to the claims and remarks filed 23 June 2006.
2. ☒ The allowed claim(s) is/are 11-15 and 19-25.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of the:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.  
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached  
1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.  
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.  
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |   |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)           |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                   |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance  |
|   | 9. <input type="checkbox"/> Other _____   |

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Dr. Michael Berger on 27 July 2006.

The application has been amended as follows:

**In the claims:**

Rewrite Claim 11 as follows: A method of inhibiting bacterial infection in a mammal wherein said infection is caused by *Bacillus* or *Escheria* bacterium, said method comprising administering to said mammal a protein comprising a sequence selected from the group consisting of: i) SEQ ID No: 8; and ii) a sequence which has 95% identity to SEQ ID No: 8, in an amount effective to kill said bacteria.

Rewrite claim 12 as follows: The method of claim 11, wherein the protein is delivered by direct administration of the protein.

Rewrite Claim 19 as follows: A method of inhibiting bacterial infection in a mammal wherein said infection is caused by *Bacillus* or *Escheria* bacterium, said method comprising administering to said mammal a pharmaceutical comprising a composition selected from the groups consisting of a bactericidal SPO1 protein comprising SEQ ID

No: 8 and a combination of bactericidal SPO1 proteins including a protein comprising SEQ ID No: 8, in an amount effective to kill said bacteria.

Rewrite Claim 22 as follows: A method of inhibiting bacterial infection in a mammal wherein said infection is caused by *Bacillus* or *Escheria* bacterium, said method comprising administering to said mammal a pharmaceutical comprising a combination of bactericidal SPO1 proteins, wherein said combination comprises a protein of SEQ ID No: 8 and one or more proteins selected from the groups consisting of SEQ ID No: 1-5, 7, 9, 10 and 12-24, in an amount effective to inhibit the growth of said bacteria.

Cancel claims 17 and 26-28.

### ***Reason's for Allowance***

2. The following is an examiner's statement of reasons for allowance: The claims are drawn to a method of inhibiting a *Bacillus* or *Escheria* bacterial infection in a mammal by administering a SEQ ID No: 8. A careful search of the prior art shows that the sequence is novel and the specification clearly establishes that this protein is able to inhibit bacterial growth for these two genus'. **Thus, the allowed claims are 11-15 and 19-25.**

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Suzanne M. Noakes, Ph.D. whose telephone number is 571-272-2924. The examiner can normally be reached on Monday to Friday, 7.30am to 4.00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jon Weber can be reached on 571-272-0925. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



SMN  
27 July 2006



KAREN COCHRANE CARLSON, PH.D.  
PRIMARY EXAMINER